



CCSMM

CT Coalition for Sustainable
Materials Management

Increase Recycling Working Group Meeting

November 9, 2020

10-12am

Increase Recycling Working Group



CT Coalition for Sustainable
Materials Management

- Welcome & Introductions, Co-chairs:

Laura Francis, First Selectman, Town of Durham

Ben Florsheim, Mayor, City of Middletown

DEEP Support Team: Sherill Baldwin, Chelsey Hahn, Elly Moore

Welcome: Housekeeping



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- Meeting is in webinar format, automatically muting all attendees that are not panelists.
- This meeting is being recorded.
- Non-municipal participants: Please share your ideas and comments through ZOOM “chat” feature.
- All are encouraged to provide feedback to:
DEEP.RecyclingProgram@ct.gov

Increase Recycling Working Group Future Meeting Dates



CT Coalition for Sustainable
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- **Full CCSMM Group Meeting** Monday, November 16: 1:00-3:00pm
- **Increase Recycling Meeting** Monday, November 23: 1:00-3:00pm
- **Increase Recycling Meeting** Monday, December 7: 1:00-3:00pm
- **Full CCSMM Group Meeting** Wednesday, December 16: 1:00-3:00pm
- **Full CCSMM Group Meeting** Tuesday, January 5: 1:00-3:00pm

Registration information can be found on the Increase Recycling Working Group webpage: <https://portal.ct.gov/DEEP/Waste-Management-and-Disposal/CCSMM/Increased-recycling>

Increase Recycling Working Group



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- Focus of Presentations/Discussion:
 - Existing Systems/ what's working, needs improvement?
 - Resources for municipalities
 - How can local groups help?
 - Necessary system improvements (diversion of problematic materials, creation of convenient local collection areas for recyclables)
 - Municipal Resources: “boxed-up” solutions that are convenient, no or low cost)
 - Will be taking the form of "menu" of options

Public Comments and Environmental Justice Presentation



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Public Comments

- Measures to improve quality of recovered materials
- Develop and support recycling end-markets (for glass and building materials)
- Construction & Demolition Debris

Topics/Issues from EJ & Equity Presentation

Mike Ewall, Energy Justice Network, <http://www.energyjustice.net>

- Zero waste approach
 - Rethink/Redesign, Reduce, Reuse, Source Separate, Unit-Based Pricing
- Support green jobs
- Incineration vs. Landfilling

10/27 Meeting Poll Results

What Topics Should We Cover At The Next Increase Recycling Working Group Meeting?

Source Separating Glass (increase quality/value) = 38%

Regional/Shared Services = 34%

Transfer Station Capacity/Satellite Collection Locations = 28%

Ban Single Use Plastics = 28%

Public Space Recycling = 21%

Repair Clinics = 14%

Recycling in Municipal Buildings, Including Schools = 10%

MSW/ Recycling Contracts = 7%



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Managing, Processing and Utilizing Glass Locally

Eric Forbes, Director, Solid Waste Management Program, Fairfax
County, Virginia

Fairfax County's Glass Recycling

Eric Forbes

Department of Public Works and Environmental Services

Working for You!



A Fairfax County, VA, publication
November 2020

Agenda

- Background
- Glass
- Glass uses
- Projects



Background

- System Dynamics
 - 90% private/10% publicly collected
- Single Stream Recycling
- Contamination & Cost
- Environmental Improvement
 - Get to true recycling



Single Stream Glass

- MRF Glass



- No Value
- Highly contaminated
- Leftovers from sorting
- Anything under 2"

LANDFILLS



Big Blue- Summer 2017



Big Blue



Big Blue



The Purple Can Club Partnership

- Fairfax County, Arlington County, City of Alexandria, and Prince William County
- Joint press release in April 2019
- Same Color & Style Purple Cans
 - Limited orifice size
- No residency restrictions



End of Curbside- October 2019

- Glass no longer accepted in Curbside Bin
- Place in Purple Bins or in Trash
- Media event for this release



<https://www.fairfaxcounty.gov/news2/glass-containers-no-longer-required-in-curbside-recycling-program/>



Glass Communication

- **Media Coverage**
 - NBC 4, USA 9, ABC 7
 - WAMU
 - Kojo Nnamdi
 - Waste360
 - Channel 16
 - US News & World Report
- **Outreach**
 - YouTube
 - Facebook, Twitter
 - Next-door
 - Web Articles
 - Local Newsletters
 - Podcasts

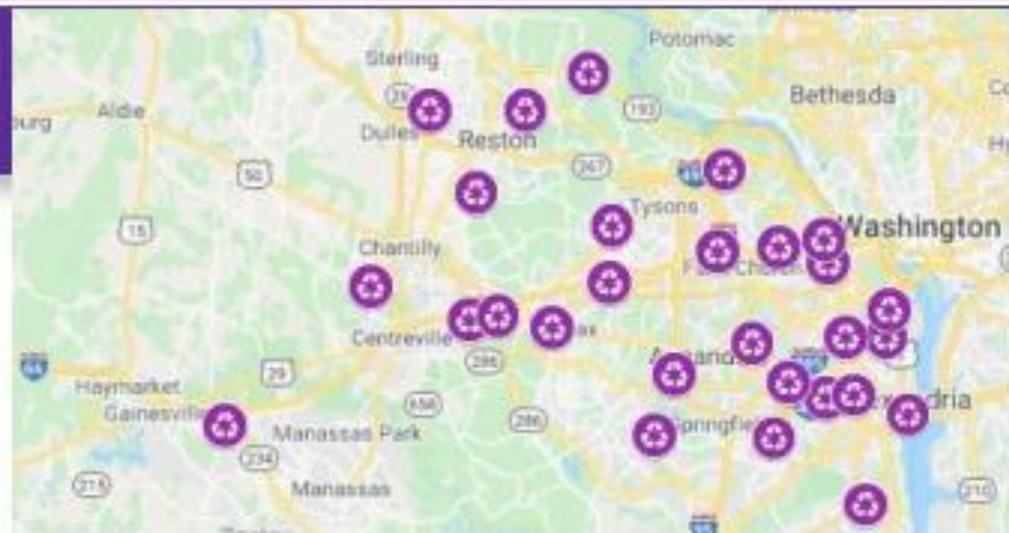


The Purple Can Club- New partners

- Loaner Bin Program
- Flexible Operational Support
- Anyone can bring clean glass \$15/Ton



Purple Can Club Locations



RECYCLE your clean, empty, and dry
GLASS We're **CRUSHING** it!



Scan the QR code to learn more about glass recycling in Fairfax County



Clean Glass



Glass to Glass

- Strategic Materials, Inc., Wilson, NC
- Carry All Products (CAP) Glass, Mount Pleasant, PA



Construction Applications

- ROW use- VDOT approved
 - Bedding & backfill
- Stormwater
 - Choker coarse (bioretention, sand filters)
 - Bio-soil
 - Erosion & sediment control
- Trail base
- Aesthetic
 - Countertops
 - Concrete finishing
 - Ground cover



Glass Aggregate Cost

- **Glass Gravel- \$8/ton**
 - #8 Stone (Pea Gravel) - \$23/ton
- **Glass Sand- \$5/ton**
 - #25 & #26- \$13.50/ton
 - Manufactured Sand- \$21.00/ton

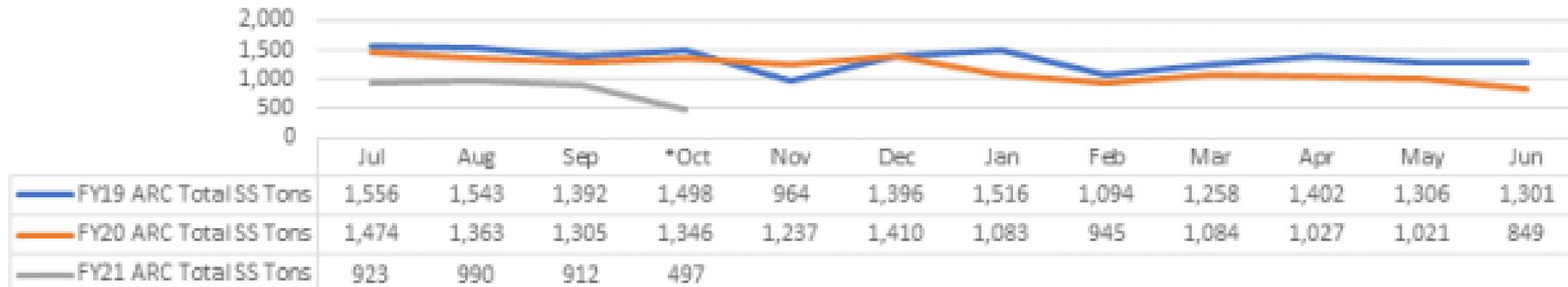
Does not include transportation cost



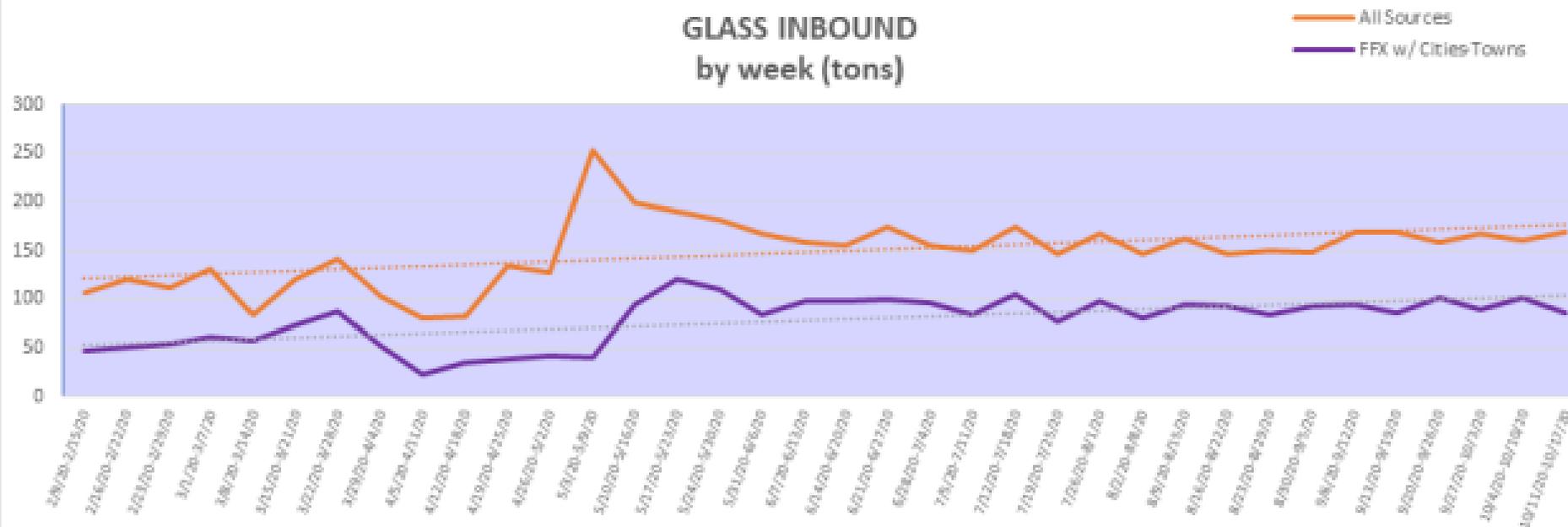
Glass Numbers

SS COMPARISON FY19 ~ FY21

*Oct 2020 - partial month



GLASS INBOUND by week (tons)



Flatlick Sewer Rehabilitation



Lower Potomac Ballpark Basin Project



Waterline Pipe Repair



For additional information please contact:

Eric Forbes

eric.forbes@fairfaxcounty.gov

703.324.5498



**FAIRFAX
RECYCLES**



<https://www.fairfaxcounty.gov/publicworks/recycling-trash/recycle>



Increase Recycling Working Group



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Deconstruction: Reducing & Recovering Demolition Debris

Sherill Baldwin, Environmental Analyst, Sustainable Materials
Management, CT DEEP



Building Deconstruction: The Value of Reuse

November 9, 2020
Sherill Baldwin
Sustainable Materials Management
CT DEEP



Connecticut Department of Energy and Environmental Protection

60% Diversion Goal

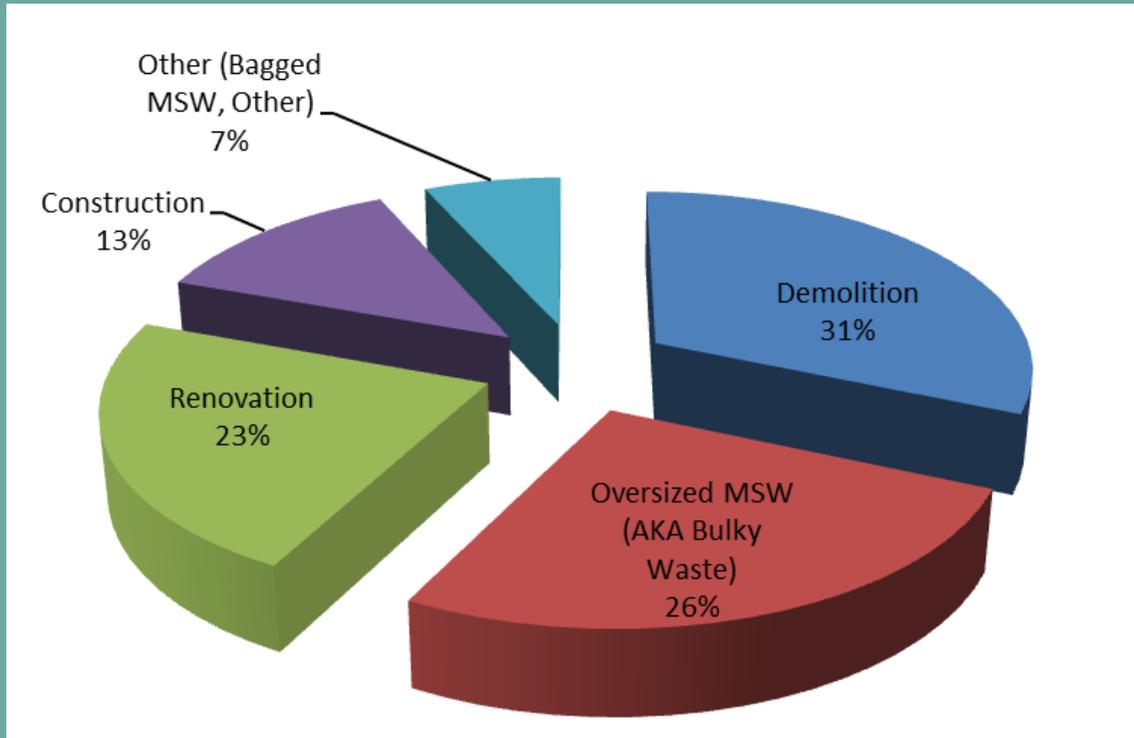
- To fully achieve the State's diversion goal... the state must also increase the diversion of Construction and Demolition (C&D) waste.

Source: CT Comprehensive Materials Management Strategy, 2015

https://portal.ct.gov/-/media/DEEP/waste_management_and_disposal/Solid_Waste_Management_Plan/CMMSFinalAdoptedComprehensiveMaterialsManagementStrategy.pdf



Inbound Waste Loads Observed at CT C&D VRFs – By Category



- In 2013, CT generated about 1,041,643 Tons of C&D debris
- Per capita generation rate:
~ 0.29 T/person/yr
- In 2013, the 4 VRFs with sorting lines avg. 7% recycling rate









DANGER
THIS EQUIPMENT
STARTS
AUTOMATICALLY

16

REUSE

- **REUSE** is extending the life of an item by using it more than once, for the same or a new function. By taking a useful product and exchanging it without reprocessing (i.e. recycling), reuse retains the embedded energy and natural resources used in the product's initial manufacturing process.



REUSE vs. RECYCLING

Recycling or “down-cycling” is the process of breaking down a used item into its raw materials/components which are then used to make new items. Reuse is often using for original use in original form or “upcycling”.

Example: Wood

- Reuse turns unwanted wood/lumber into flooring or furniture
- Recycling turns unwanted wood/lumber into sawdust, mulch or pellets.



Demolitions in CT

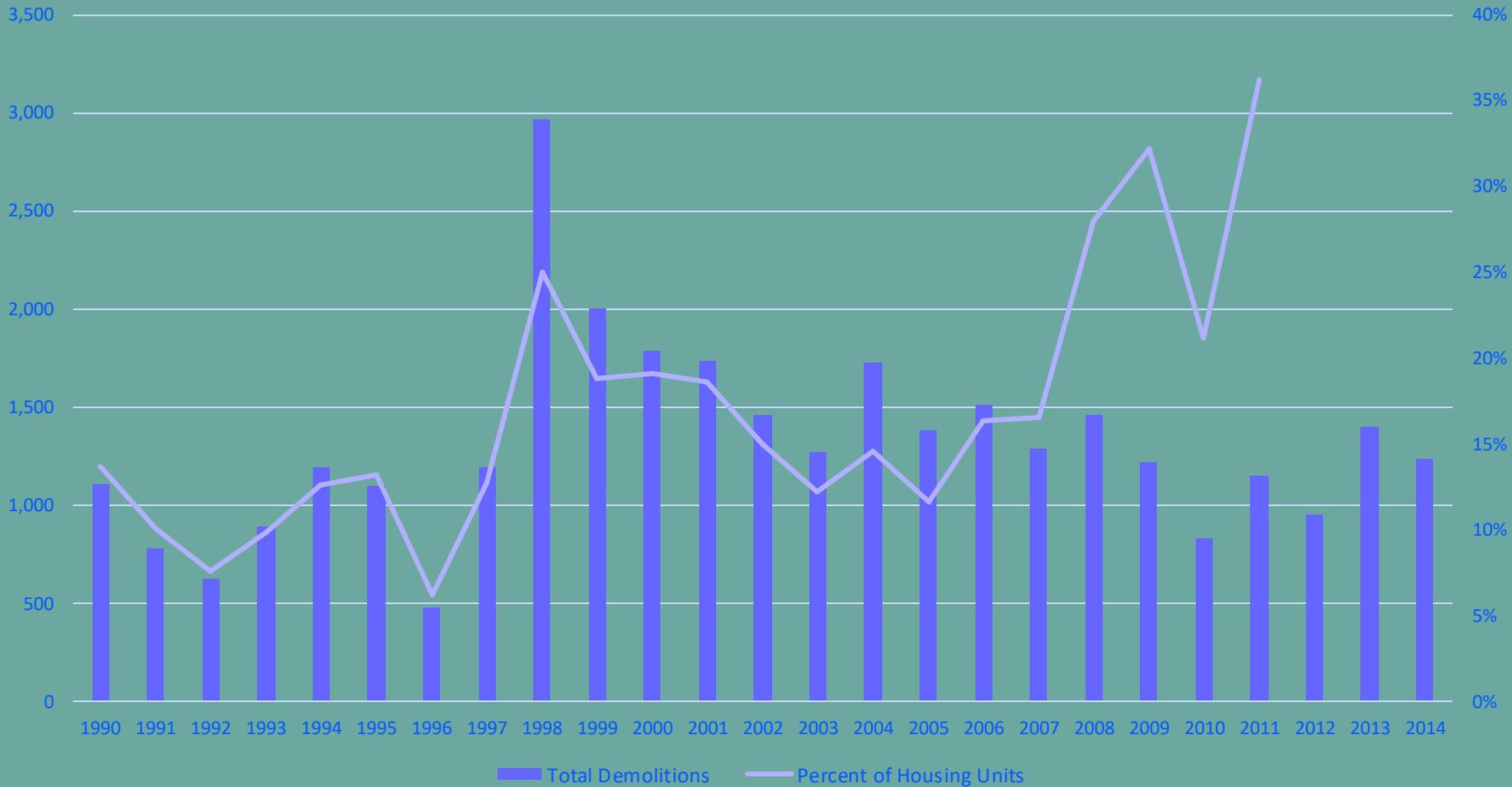


Photo: Kelsey Quartuccio/DEEP Intern



Connecticut Department of Energy and Environmental Protection

Building Demolitions in CT (1990-2014)



Deconstruction

The systematic dismantling of a building or its parts to salvage and harvest the components within; with the purpose of reusing and/or recycling these reclaimed materials and commodities for their maximum economic and environmental value.

-Introduction to Deconstruction: A Comprehensive Training Manual, Building Material Reuse Association, 2012



Parts of Building Material Reuse

- Clean Outs
- Soft Stripping
- Full Deconstruction – structural impact
- Building Material Reuse Center





Photo: Joe DeRisi/Urbanminers, LLC

Reusable Materials

- Wood (lumber, flooring)
- Windows, Doors
- Cabinets
- Plumbing Products (aka ceramics)
- Electrical Products
- Radiators, woodstoves, etc.
- Landscape materials – including plants
- Non-wood flooring
- Roofing materials



Wood (lumber, flooring)

Reuse

- Timbers; large dimension lumber; plywood; flooring; molding; lumber longer than 6 feet

Recycle

- Unpainted and untreated wood unfit for reuse



Photo: Joe DeRisi/Urbanminers, LLC





Reuse

- Windows in good condition (for single panes, consider adding storm windows)

Recycle

- Metal frames and screens; unpainted and untreated wood
- Window “glass”



Cabinets

Reuse

- Cabinets; hardware (hinges and knobs)

Recycle

- Hardware; unpainted and unfinished wood





Plumbing Products

Reuse

- Sinks; tubs; toilets; faucets

Recycle/Dispose

- Metal pipe; outdated toilets; inefficient plumbing fixtures; faucets with lead content



Electrical Products

Reuse

- Electrical products in good working order

Recycle

- Metals (fixtures, conduit)



Landscape Materials

Reuse

- Timbers; stone; concrete; brick
- Shrubs; perennials; small trees

Recycle

- Untreated, unpainted wood





Reuse and Recycling Industry
Increasing commercial and residential recycling collection within the state will directly increase local jobs.

Photo: Dave Bennink/RE-USE Consulting

If building deconstruction were fully integrated into the demolition industry, at least 100,000 jobs could be created in this sector.



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- Energize Connecticut >
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Environmental Protection

by Keyword



High Performance (Green) Building Standards for State Agency Buildings and School Buildings

2019 Update-Connecticut High Performance Buildings

Connecticut's green construction standards help achieve the state's greenhouse gas emission, energy, and cost reduction goals while driving economic growth. This year, the Connecticut General Assembly passed [Public Act 19-35](#) , titled "The Green Economy and Environmental Protection" bill, which amended the state building construction statute (CGS §16a-38k). Now, DEEP is required to adopt high performance building regulations based on a national sustainable construction code. DEEP has started its review of these nationally recognized models. Until the new regulations are adopted, projects are required to comply with the current regulations ([RCSA 16a-38k-1 through 16a-38k-9](#) ).

Background

Since 2007, Connecticut law has mandated high performance efficiency buildings (CGS § 16a-38k). As required, DEEP has adopted high performance (Green) building construction regulations that incorporate design, construction, and operation practices that preserve the natural environment (RCSA 16a-38k 1-9). These state construction standards are consistent with, or in some cases, have exceeded the Leadership in Energy and Environment (LEED) silver design building rating system.

Connecticut High Performance Building Standards Apply to:

State Facilities

The project bond funds were allocated after Jan 1, 2008.

New Construction

Projected cost greater than, or equal to \$5 million.

Building Standard Optional Strategies- State Facilities

Recycling, Reuse, and Sustainability

The following thirteen strategies are available for improving recycling, reuse, and sustainability. At least two options within this category must be selected:

Section 16a-38k-4 (d)(1): Retain at least 75 percent, by surface area, of an existing building structure, including structural floor and roof decking, exterior framing, and envelope surface, but excluding window assemblies and non-structural roofing material. This strategy only applies to renovation projects.

Section 16a-38k-4 (d)(2): Same as subsection (d)(1) above, except that a total of 95 percent of the building structure is retained. This strategy only applies to renovation projects.

Section 16a-38k-4 (d)(3): Use existing non-structural elements such as interior walls, doors, floor coverings and ceiling systems in at least half (by square footage) of the completed building. This strategy only applies to renovation projects.

Compliance Assistance for Optional Strategies (d)(1) through (d)(3)

Consider reusing existing, previously occupied buildings, including structure, envelope, and elements. Remove any elements that pose a contamination risk to building occupants and upgrade the components that would improve energy and water efficiency such as windows, mechanical systems, and plumbing fixtures

Section 16a-38k-4 (d)(4): Recycle or salvage at least half of non-hazardous construction and demolition debris.

Section 16a-38k-4 (d)(5): Same as subsection (d)(4) above, except that a total of 75 percent of non-hazardous construction and demolition debris is recycled or salvaged.

Compliance Assistance for Optional Strategies (d)(4) and (d)(5)

Waste Management Main Page >

Emergency Response and Spill Prevention >

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Construction and Demolition Materials Management



"What's the use of a fine house if you haven't got a tolerable planet to put it on?"

– Henry David Thoreau

Construction and demolition waste (C&D) is managed like other solid waste in that a general solid waste management hierarchy is followed. In the hierarchy of solid waste management methods, source reduction and recycling get the highest priority, and disposal at landfills and incinerators are the least preferred options.

C&D is usually managed as a single waste stream, however, in the state of Connecticut, this material is categorized and regulated as a distinct type of municipal solid waste (MSW) and the materials from demolition and deconstruction activities are a type of 'bulky waste'.

The state's goal is to increase the amount of C&D materials we recover for reuse and recycling. Toward that end, some C&D materials may qualify for a **"beneficial use determination"** (BUD), in which solid waste is reused in a manufacturing process to make a new product or as an effective substitute for materials used in a commercial product. For example, residential asphalt roofing shingles can be ground and used as paving products, or gypsum wallboard from new construction can be ground and used as an agricultural soil amendment.



What Is Construction & Demolition Waste?

Deconstruction	Environmental & Human Health Issues	Green Building
Reuse, Recycling & Disposal Options	Asphalt Shingle Recycling	Local Management of C&D Waste
Construction Waste Management Plans	Beneficial Use of Solid Waste	Additional C&D Resources

Related Topics

[Permits & Licenses](#)

[Information Resources for Contractors in the Construction Trades](#)

[Disposal of Building Materials Coated With Lead-Based Paint](#) 

[Management and Disposal of Lead-Contaminated Materials](#) 

[Illegal Dumping](#)

[Brush and Stump Management](#)

[Contaminated Soil and Sediment Staging and Transfer General Permit](#)

[Remediation Site Cleanup](#)

[Remediation Waste](#)

[Disaster Debris Management Preparedness](#)

["Red Flag" List: C&D Information for Local Officials](#)

Reuse, Recycling & Disposal Options for C & D

Whether you are a construction, deconstruction or demolition contractor, you have options for how to manage materials generated at your job site. Develop a [waste management plan](#) to help you recover more materials through reuse and recycling. Use the resources below to better understand the

[Reduce/Reuse/Recycle Main Page](#) >

[Recycling...It's the Law!](#) >

[Recycling Means Jobs](#) >

[Recycling At Home](#) >

[Business Recycling Assistance](#) >

[Recycling at Schools and Institutions](#) >

[Special Event and Venue Recycling](#) >

[Municipal Recycling Resource Center](#) >

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Deconstruction

- [Deconstruction vs. Demolition](#)
- [What is Deconstruction?](#)
- [Licensing & Local Ordinances](#)
- [Training](#)
- [Reuse, Recycling & Disposal Options](#)
- [Deconstruction Services](#) 
- [Markets for Used Building Materials](#)
- [Architectural Salvage and Historic Preservation Resources](#)
- [Additional Resources](#)
- [Related Topics](#)



Deconstruction focuses on giving the materials within a building a “new life” once the building as a whole can no longer be used as a safe viable structure. Components within old buildings may still be valuable, sometimes more valuable than at the time the building was constructed. Deconstruction is a method that harvests what is commonly considered “waste” and reclaims it into useful building material. Recovering building materials through reuse and recycling will help Connecticut meet its 60% diversion/recycling goal by the year 2024.

Deconstruction vs. Demolition

When buildings reach the end of their useful life, they are typically removed through conventional demolition and hauled to landfills. In Connecticut most construction and demolition materials are not sorted for reuse or recycling, but instead are brought to volume reduction facilities and then transferred to out of state landfills. Building implosions or ‘wrecking ball’ style demolitions are

[Reduce/Reuse/Recycle Main Page](#) >

[Recycling...It's the Law!](#) >

[Recycling Means Jobs](#) >

[Recycling At Home](#) >

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Local Management of Construction & Demolition Waste

Local ordinances create incentives and encourage recycling of construction and demolition (C&D) waste, which can improve a community's overall recycling rate. C&D recycling ordinances include 'green', 'sustainable' and 'LEED' building techniques and may apply to construction, renovation and/or demolition projects. Several states have passed laws requiring ordinances and other cities are passing ordinances taking the lead in their state.



Most C&D reuse and recycling ordinances or policies that are implemented include the following:

- Recycling of C&D debris
- Reusing building materials on the project site
- Deconstruction to maximize reuse
- Specifying types and quantities of materials recovered for reuse and recycling
- Reporting requirement
- Compliance tools including fees and penalties for non-compliance

Sample Ordinances and Regulation of C&D Waste

[Ordinance for Managing Construction and Demolition Waste Created by Deconstruction of a Building \(Iowa DNR\) - A model template.](#)

[Construction and Demolition \(C&D\) Diversion Informational Guide](#) (CalRcycle) Information about California's C & D Diversion Program, including their model ordinance, case studies, and reference documents.

[C&D Site Waste Recycling](#) 🇺🇸 (City of Chicago, IL) Ordinance/Regulation

[Green Building Ordinance](#) (City of Newark, CA)

Examples of Programs Implemented as a Result of Passing C & D Recycling Ordinances

[Lee County Government](#) (Florida)

[City of Stockton](#) (California)

[Foster City](#) (California)

[Village of Northbrook](#) (Illinois)

[Orange County](#) (North Carolina)

[City of Madison](#) (Wisconsin)

[City of Chicago](#) (Illinois)

Technical Resources

[Overview of Draft Ordinances to Assist Local Governments](#) (Slide presentation by Attorney Ivan T. Webber)

[C&D Debris Recycling](#) (Iowa, DNR) Includes case studies and workshop presentations

[Deconstruction Case Studies, Technical References, and Directories](#) (King County, WA)

[C&D Recycling Tools](#) (King County, WA)

[Refuse Permit Ordinance](#) (City of Chicago) - Began April 1, 2009

Other Resources

[On the Road to Reuse: Residential Demolition Bid Specification Development Tool](#) September 2013, (EPA)

[Construction and Demolition Waste Management Plans](#) (CT DEEP)

[Sustainable Design and Green Building Toolkit for Local Governments](#) (EPA)

[Boulder Green Building and Green Points Program](#) (Boulder, CO)

Questions?

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Sustainable Materials Management

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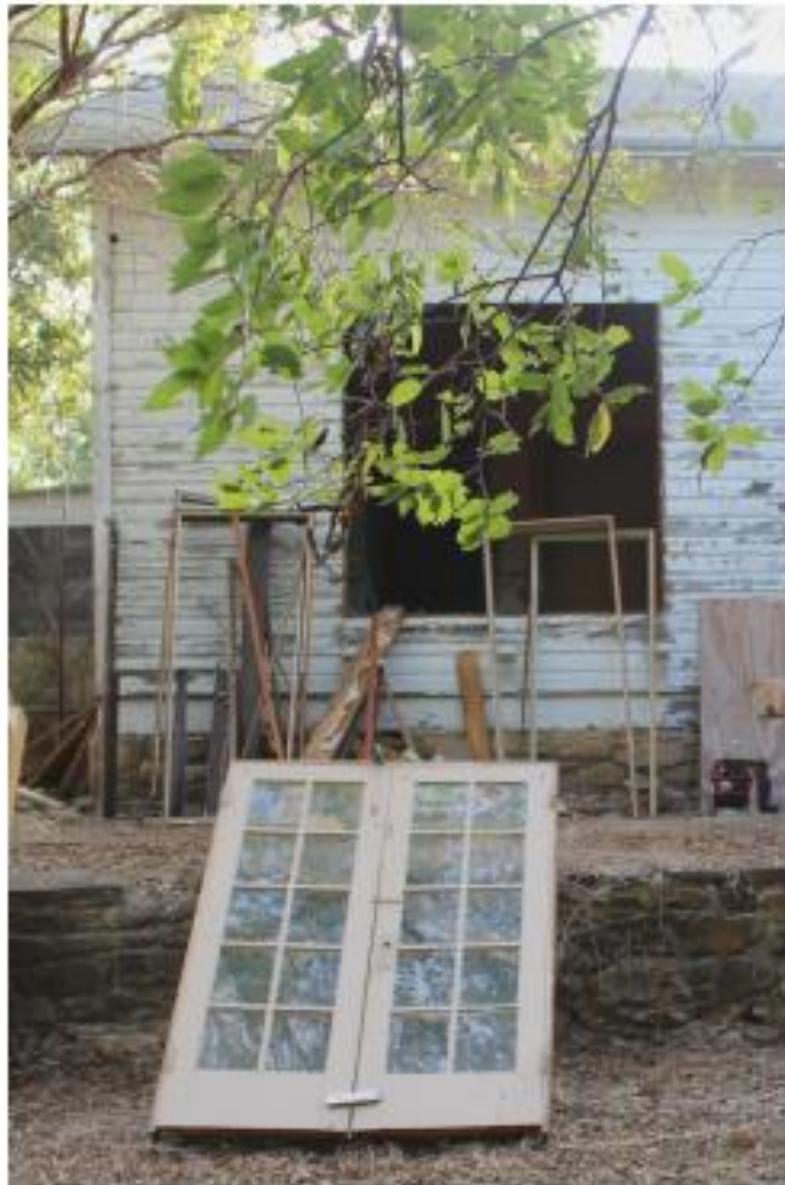
Increase Recycling Working Group



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Materials Management

Deconstruction: Reducing & Recovering Demolition Debris

Stephanie Phillips, Sr Historic Preservation Specialist, Office of Historic Preservation, San Antonio, Texas



San Antonio Deconstruction & Salvage Initiative

Stephanie Phillips



CITY OF SAN ANTONIO
OFFICE OF HISTORIC PRESERVATION



Initiative summary
(2018 - present)



Preliminary policy
recommendations
and next steps

What is deconstruction?

Deconstruction refers to the systematic disassembly of a structure in the opposite order it was constructed to **maximize the opportunity to reclaim materials** for reuse or recycling

In contrast, traditional demolition uses heavy machinery to quickly remove a structure, resulting in most materials crushed and landfilled



Business as Usual



Nationally, construction & demolition (C&D) waste accounts for approximately 30% of the total waste stream - more than double the amount we throw into our household trash bins in volume.

Sources: EPA (2017), Delta Institute

On average, a ~1,000 square foot house has the equivalent of **16 mature trees.**

100+

Estimated tons of material that could be diverted from area landfills and re-utilized locally, annually

The laws of physics haven't changed. However, the quality of building materials has.



5-15%
**OF MATERIALS CANNOT BE
REUSED OR RECYCLED**

UP TO 70%
**OF MATERIALS
CAN BE RECYCLED**

UP TO 25%
**OF MATERIALS
CAN BE REUSED**



Figure 1: Many homes contain materials that have financial value in the reuse market.

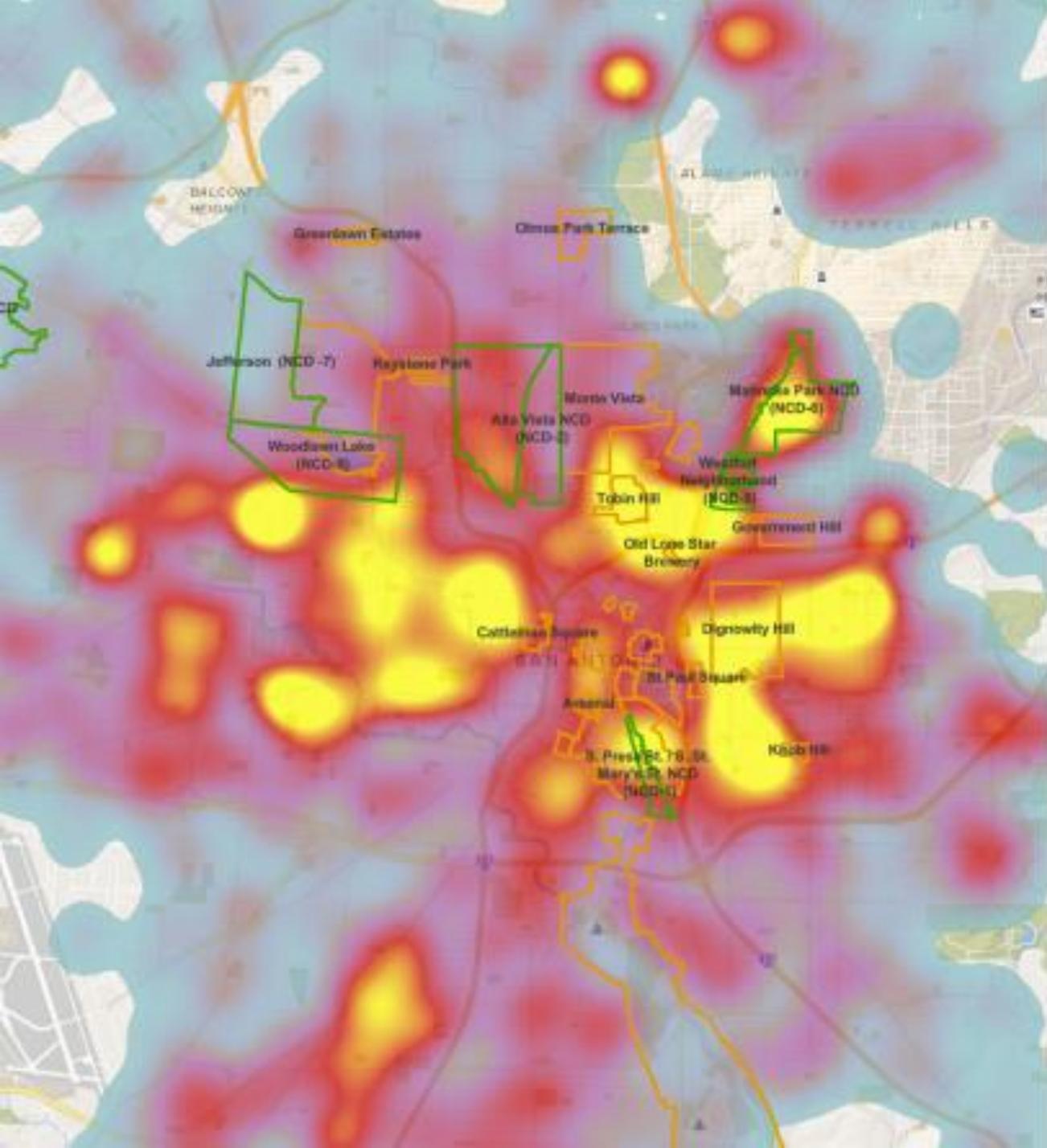
The Secretary of the Interior's Standards

If a historic feature or material is deteriorated beyond repair or missing, it should be reconstructed or **replaced in-kind.**





Like an organ donor, a structure may have reached the end of its life, but its pieces could help extend the lives of dozens of other historic structures.



DEMOLITIONS BY YEAR (PERMIT DATA)





DECONSTRUCTION ADVISORY COMMITTEE

- Solid Waste Management Department
- Office of Sustainability
- Development Services Department
- Neighborhood and Housing Services Department
- Metro Health
- Build San Antonio Green
- Habitat for Humanity
- Alamo Area Council of Governments (AACOG)
- Local demolition, salvage, and house moving contractors
- Developers and real estate industry representatives
- UTSA Construction Science and Architecture educators
- The Conservation Society of San Antonio
- Community advocates
- Local architects and designers

This initiative is not about **if** a building comes down, but rather **how** a building comes down.

WORKERS TO BEGIN ACTIVITY MONDAY

Old Postoffice Will Be Down Within 30 Days, Con- tractor Says

After 45 years of service to the public, San Antonio's post office and Federal building Monday will give way to the crowbars and hammers of wrecking crews who within 30 days will have demolished the structure preparatory to building the new building.

Some 40 men will begin razing the mail shed adjoining the rear of the old building as the first phase of the razing program. That levelled, workmen will transfer to the main building, beginning wrecking activities with removal of the tile roof and working downward until every tile, stone and piece of woodwork is removed.

A maximum of 200 men will be employed for the work. It was made plain that no men will be hired at the site. All workmen will be selected from registration lists of the National Re-employment office.



Climate Action and Adaptation Plan (2019)

		STRATEGIES
ADVANCE THE CIRCULAR ECONOMY	★ 14	COMMERCIAL WASTE REDUCTION Building on the City of San Antonio Solid Waste Management Department's ReWorksSA Program, ⁴⁰ continue to reduce landfilled commercial waste.
	★ 15	RESIDENTIAL WASTE REDUCTION Continue to reduce landfilled residential waste with the goal of becoming a zero-waste community.
	16	ORGANICS DIVERSION Accelerate the diversion of organics from landfills to the highest and best use opportunities and ensure low-carbon composting solutions.
	★ 17	MATERIAL REUSE AND CIRCULARITY Support the development of a local circular economy to extend product lifespan through improved design and servicing and relocating waste from the end of the supply chain to the beginning.
	★ 18	REDUCED-LANDFILL CONSTRUCTION Building on CoSA's Deconstruction Pilot Program, ⁴¹ accelerate the acceptance of low-waste construction projects through education, incentives and partnerships, and continue to pursue zero-landfill waste practices for all construction projects.



LINEAR ECONOMY



RECYCLING ECONOMY



CIRCULAR ECONOMY



A foundation for material circularity
& circular economy policy



OPPORTUNITY AT RISK

San Antonio's Older Affordable Housing Stock



Every week over the last ten years, San Antonio has lost 3 units of pre-1960 housing to demolition.

- Existing, older buildings largely provide existing affordable housing but are at risk
- Older buildings also largely house at-risk communities
- Deferred maintenance contributes to accelerated deterioration; recommended increased focus on routine maintenance programs
- More than 25% of all homes in San Antonio were constructed prior to 1960

Community Engagement



Community
events



Neighborhood
Association
meetings



Public input
meetings





CITY OF SAN ANTONIO "PROCLAMATION"

- WHEREAS, On November 16, 2019, Build San Antonio Green hosted its 19th Annual Solar Festival at Hemisfair; and
- WHEREAS, The City's recent adoption of the Climate Action and Adaptation Plan prioritizes strategies to reduce landfill waste and encourage a circular economy of materials through reuse; and
- WHEREAS, The City's Deconstruction and Salvage Initiative, led by the Office of Historic Preservation, aims to explore both architectural and creative reuse of reclaimed building materials; and
- WHEREAS, The City of San Antonio Office of Historic Preservation, as a leader within the international Climate Heritage Network, promotes historic preservation and building reuse policies that address the impacts of climate change on built and cultural heritage; and
- WHEREAS, Solar Festival organizers have agreed to the pardoning of a wood turkey constructed from reclaimed building materials, known as Sally the Salvaged Turkey, to remind us of the role we all play in achieving waste reduction goals.

Now, therefore, I, Ron Nirenberg, Mayor of the City of San Antonio, in recognition thereof, do hereby proclaim Sally the Salvaged Turkey
PARDONED FROM THE LANDFILL.



Ron Nirenberg, Mayor



CITY OF SAN ANTONIO
OFFICE OF HISTORIC PRESERVATION

Innovation & tech

How can the City quantifiably reduce the volume of reusable or recyclable building materials that end up in the landfill by developing a digital tool that connects sellers and buyers of salvaged materials?

Refinder

Find materials near you...

Explore

- Wood
Find pallets, panels, beams...
- Bricks & Concrete
Find bricks and concrete
- Slates & Tiles
Find slates, tiles, mosaic
- Glass
Find mirrors, structural gl...
- Fixtures
Find doors, windows, cabinets...
- Flooring
Find wood floors, parquet...
- Antique
Find furniture, items



Rustic wood siding from old homes, good condition

1 month ago

\$ 800 Harding Place



1000 Red Bricks

1 month ago

\$ 514 Enrique M Barrios Parkway



Furniture Pecan Wood Slabs

2 weeks ago

\$ 20000 Bristol Court



Cheap wooden pallets (nails included), all must go!

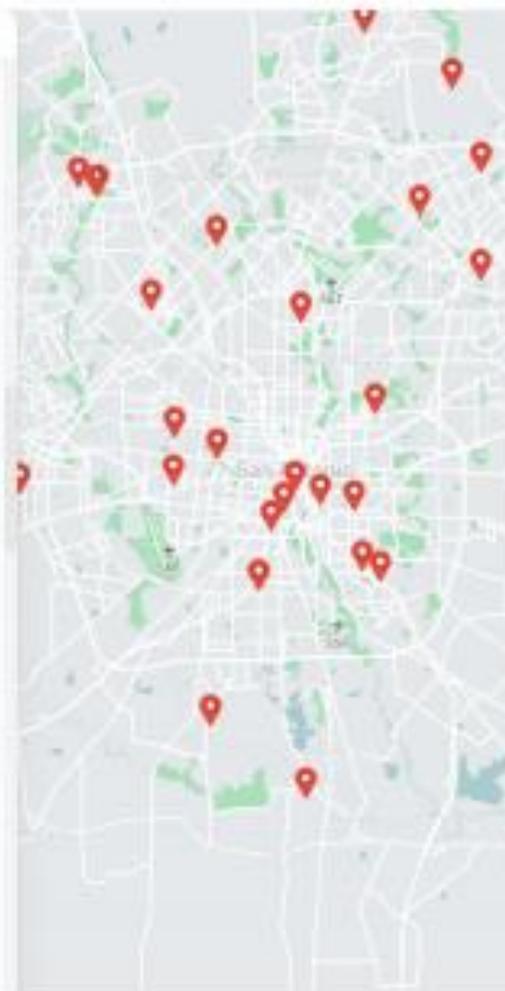
1 month ago

\$ 3000 Blue Willow Street



27 1/4 x 30 inches double pane windows

1 month ago





Engaging nationally across sectors

DECONSTRUCTION
THINK TANK

FEBRUARY 2020



Engaging
internationally in
the growing
Climate Heritage
movement

CLIMATEHERITAGE.ORG

WE ARE A MEMBER OF THE



Climate Heritage
N E T W O R K

Mobilising arts, culture & cultural heritage for
#climateaction



Training a
workforce



6:1

The national average ratio of jobs created by deconstruction versus demolition

DECONSTRUCTION

economic, community, and environmental benefits



Remove hazardous structure



Deconstruction jobs (up to 3 weeks)



Warehouse jobs



Retail jobs



Value-added manufacturing jobs



Job training & skill-building



Avoided landfill costs & emissions

DEMOLITION

economic, community, and environmental benefits



Remove hazardous structure



Demolition jobs (1 day)

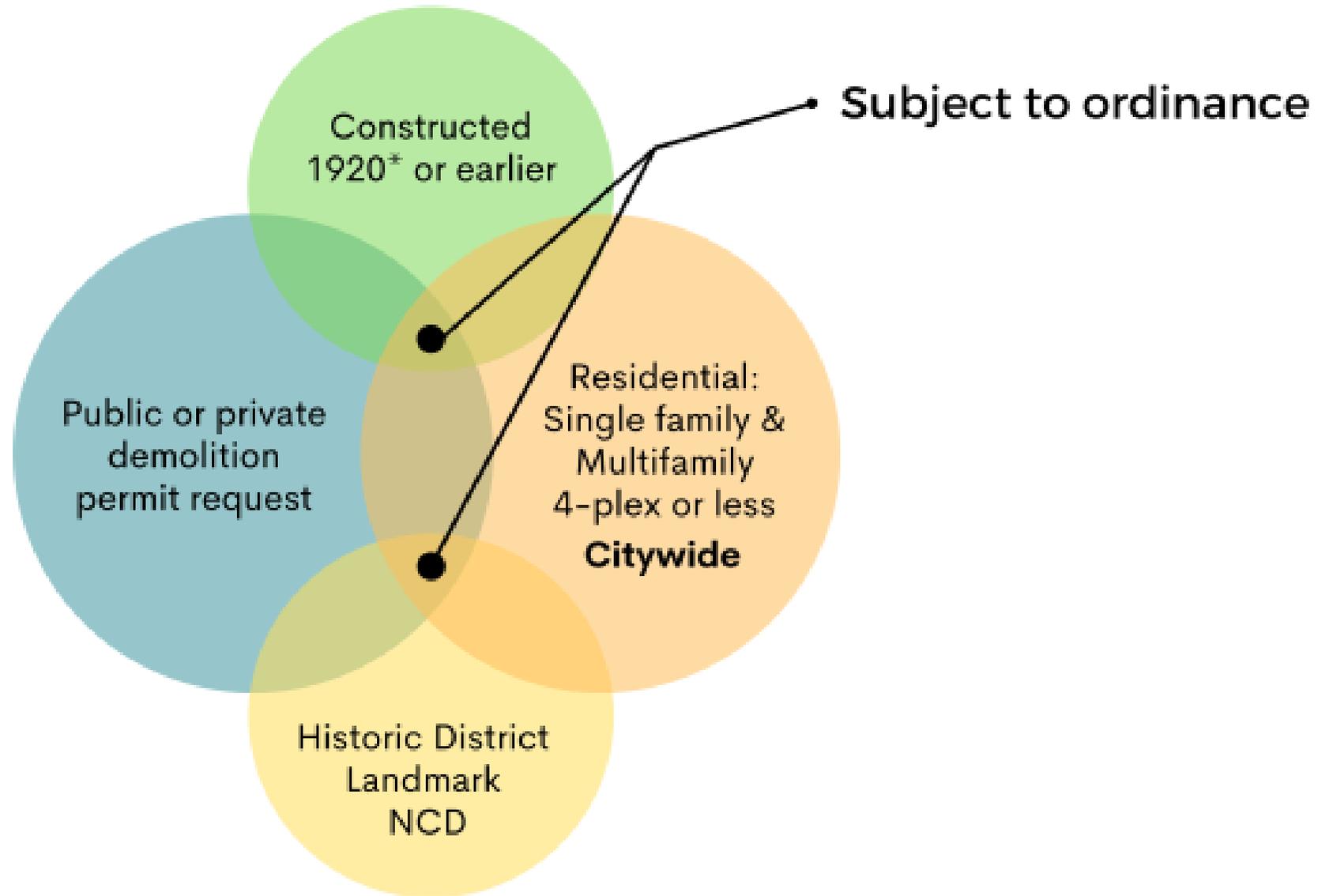


Landfill jobs

Stakeholder Feedback

Stakeholder	Concern	Proposed Solution
Developers	Cost	Competition, fee structure, incentives
Developers	Time	Competition, incentives
Developers	Contractor availability	Contractor training
Developers	Flooding material market	Year-built threshold, phased policy
Contractors	Advancing local market	Partnerships, innovations
Contractors	House feasibility/worthiness	Year-built threshold, exemptions
Contractors	Location for materials	Temporary warehouse, partnerships
Community	Maximizing salvage	Certified contractors
Community	Public health	Certified contractors, inspections
Community	Retaining materials in neighborhood	Signage, partnerships, innovations

Proposed Ordinance (2020)



Recommended Phasing

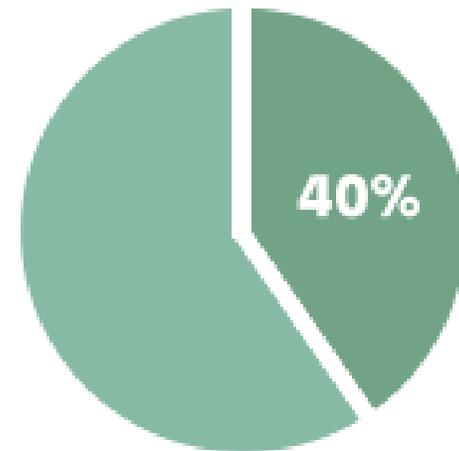
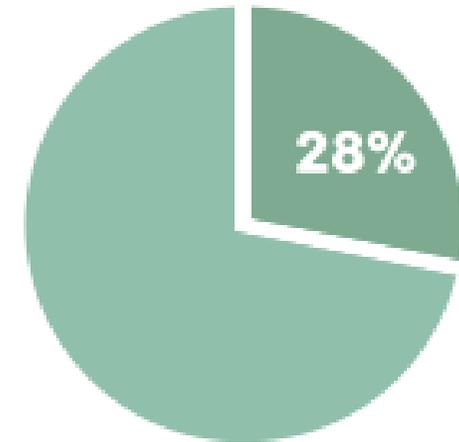
Phase I

- Residential single family + multifamily 4 units or less built in 1920 or earlier
- Residential single family + multifamily 4 units or less in Historic Districts, landmarks, or NCDs, regardless of age
- **Estimated per year: 70 - 90**

Phase II (18-24 months after)

- Residential single family + multifamily 8 units or less built in 1945 or earlier
- Residential single family + multifamily 8 units or less in Historic Districts, landmarks, or NCDs, regardless of age
- **Estimated per year: 120 - 140**

Percent of permits



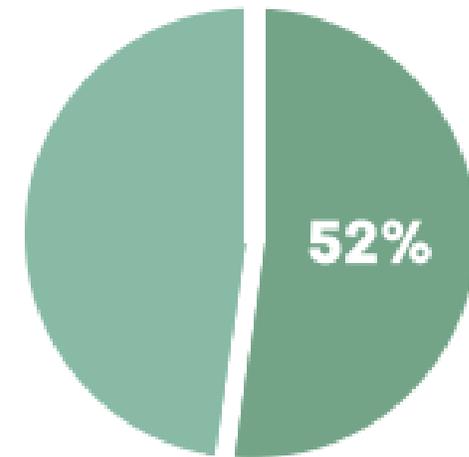
Future Phases*

Phase III

- Any structure built in 1945 or earlier
- Any structure in Historic Districts, landmarks, or NCDs, regardless of age
- Requirement or incentive to utilize salvaged materials in exterior of new construction receiving City incentives or in design overlays
- Incentive for use of salvaged materials in affordable housing structures or developments
- **Estimated per year: 170 - 190**

**would require future Council action*

Percent of permits



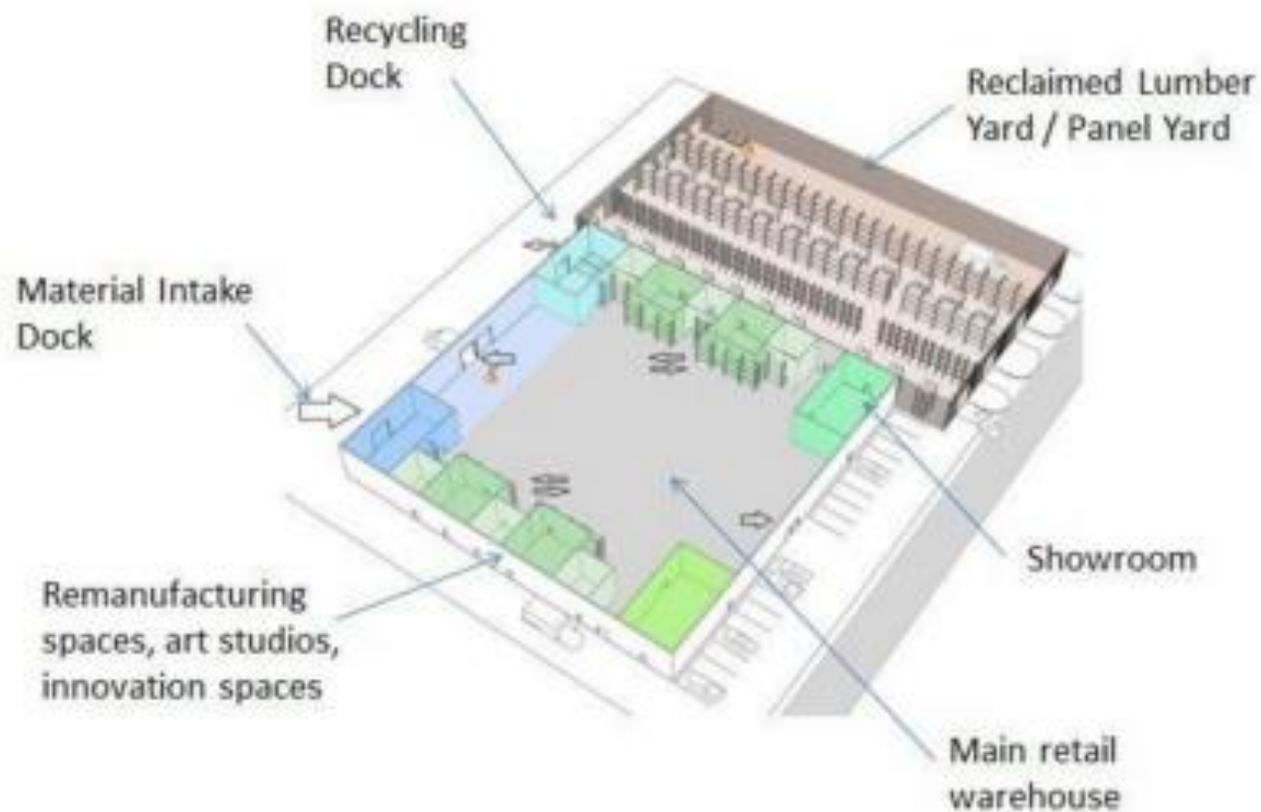
Deconstruction Strategic Plan

- AACOG Solid Waste Pass Through Grant for study
- Assess how the deconstruction & reuse industry can aid in COVID-19 economic recovery
- Assigning dollar value to job creation, industry revenue potential, and landfilled materials - "*cost of loss*"
- Assessment of City reuse innovation center or hub approaches
- Target completion: Fall 2020

Reuse Innovation Center

- Open ended
- City role in incubating (space, land, another method)
- Trades education and reuse as a circular economy tool
- Affordable housing connection
- Potential to house or expand into other reuse sectors

Example center concept



December, 2019

To Shawn Wood - The City of Portland, Oregon.

Thank you for your support. Together we were able to produce the first 100% Salvaged Lumber Cross-Laminated Timber panels with material from Portland, OR deconstruction practices. This is a great step towards a more sustainable future.

Sincerely,

Raphael Arbelaez
M.S. Wood Science



@raphaelarbelaez



linkedin.com/in/raphaelarbelaez

“Never demolish, never remove
or replace, always add, transform,
and reuse!”

Address affordable housing goals

Workforce development, building on existing trades education

Job creation and reuse-focused



Deconstruction & Salvage Initiative

www.SAreuse.com



CITY OF SAN ANTONIO
OFFICE OF HISTORIC PRESERVATION

Increase Recycling Working Group



CT Coalition for Sustainable
Materials Management

- Questions, Comments/Discussion for municipal participants
- For non-municipal attendees, to submit comments and solutions, use the CHAT box or submit them through [the public engagement request for comments and solutions](#) or email DEEP.RecyclingProgram@ct.gov

Increase Recycling Working Group



CT Coalition for Sustainable
Materials Management

Next meeting

Monday, November 23: 1:00-3:00pm

- **Municipal Transfer Station General Permits, Satellite Sites**

Gabrielle Frigon, Assistant Director, Waste Engineering
and Enforcement Division, CT DEEP

- **Pros and Cons of Waste Authorities and How to Create One**
Speaker, TBA

- **Recycling and Waste Contracts**

The Recycling Partnership (invited)

Increase Recycling Working Group Future Meeting Dates



CT Coalition for Sustainable
Materials Management

- **Full CCSMM Group Meeting** Monday, November 16: 1:00-3:00pm
- **Increase Recycling Meeting** Monday, November 23: 1:00-3:00pm
- **Increase Recycling Meeting** Monday, December 7: 1:00-3:00pm
- **Full CCSMM Group Meeting** Wednesday, December 16: 1:00-3:00pm
- **Full CCSMM Group Meeting** Tuesday, January 5: 1:00-3:00pm

Registration information can be found on the Increase Recycling Working Group webpage: <https://portal.ct.gov/DEEP/Waste-Management-and-Disposal/CCSMM/Increased-recycling>